

Claims:

1. An electronic circuit device comprising,
 an electronic circuit element,
 a substrate including a front surface on
which the electronic circuit element is mounted and a
reverse surface opposite to the front surface in a
thickness direction of the substrate,
 an electrically conductive terminal member
electrically connected to the electronic circuit
element,
 a lead frame extending perpendicular to the
thickness direction to face the reverse surface in the
thickness direction, and
 a sealing resin covering at least partially
the electronic circuit element, substrate and lead
frame while at least a part of the electrically
conductive terminal member is prevented from being
covered by the sealing resin,
 wherein in a cross sectional view taken along
an imaginary plane passing the substrate and lead frame
and extending parallel to the thickness direction, the
substrate extends to project outward with respect to an
end of the lead frame in a transverse direction
perpendicular to the thickness direction while the end
of the lead frame is covered by the sealing resin.
2. An electronic circuit device according to
claim 1, wherein a coefficient of linear expansion of
the lead frame in the transverse direction is smaller

than a coefficient of linear expansion of the sealing resin.

3. An electronic circuit device according to claim 1, wherein a difference in coefficient of linear expansion in the transverse direction between the substrate and the lead frame is smaller than a difference in coefficient of linear expansion in the transverse direction between the sealing resin and the lead frame.

4. An electronic circuit device according to claim 1, further comprising a resin adhesive through which the lead frame is adhered to the reverse surface.

5. An electronic circuit device according to claim 1, wherein the lead frame is prevented from being formed through a deposition process on the reverse surface.

6. An electronic circuit device according to claim 5, wherein the deposition process includes at least one of sputtering and plating.

7. An electronic circuit device according to claim 1, wherein the end of the lead frame is formed by a shearing process.

8. An electronic circuit device according to claim 1, wherein the end of the lead frame is formed by an etching process.

9. An electronic circuit device according to claim 1, wherein the imaginary plane extends parallel to a longitudinal direction of the at least a part of

the electrically conductive terminal member.

10. An electronic circuit device according to claim 1, wherein the electronic circuit device comprises a plurality of the electrically conductive terminal members juxtaposed in an electrically conductive terminal member array direction, and the imaginary plane extends perpendicular to the electrically conductive terminal member array direction.

11. An electronic circuit device according to claim 1, wherein the lead frame is formed in one-piece, a part of the lead frame in one-piece is prevented from being covered by the sealing resin to protrude from the sealing resin in a protruding direction perpendicular to the thickness and transverse directions, and the imaginary plane extends perpendicular to the protruding direction.

12. An electronic circuit device according to claim 11, wherein the lead frame has a surface facing to the reverse surface in the thickness direction and prevented from being covered by the sealing resin to protrude from the sealing resin in the protruding direction.

13. An electronic circuit device according to claim 1, wherein in the cross sectional view, the substrate extends to project outward in the transverse direction with respect to another end of the lead frame opposite to the end of the lead frame in the transverse

direction while the another end of the lead frame is covered by the sealing resin.

14. An electronic circuit device according to claim 13, wherein a part of the lead frame is prevented from being covered by the sealing resin to protrude from the sealing resin in a protruding direction perpendicular to the thickness and transverse directions, and a width between the another end and the end in the cross sectional view is smaller than a width of the part of the lead frame in the transverse direction.

15. An electronic circuit device according to claim 13, wherein in the cross sectional view, a width of the lead frame between the another end and the end is not more than 80 % of a width of the substrate.

16. An electronic circuit device according to claim 1, wherein the electronic circuit element includes a semiconductor body whose main component is a semiconductor, and as seen in the thickness direction, the semiconductor body and the lead frame overlap with each other.

17. An electronic circuit device according to claim 16, wherein the electronic circuit element includes at least one of a central processing unit and a power transistor.

18. An electronic circuit device according to claim 16, wherein as seen in the thickness direction, the whole of the semiconductor body overlaps with the

lead frame.

19. An electronic circuit device according to claim 1, wherein the lead frame is prevented from being electrically connected to the electronic circuit element.

20. An electronic circuit device according to claim 1, wherein the lead frame is metallic, and a main component of the substrate is a ceramic.